



ARS Grape and Wine Industry Workshop

Quality and Health

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Definition of Quality

The combination of sensory and nutritional attributes that is pleasing to the potential consumer of grapes or grape products.

“suitability for purpose”

Researchable Objectives for Quality

- These objectives will require partnering between industry, ARS, and Universities.
- Identify and quantify components that define quality. Identify specifications that are important for quality determinations.
- Develop rapid, real-time analytical methods to identify and quantify parameters of quality that can be transferred to the vineyard/industry. (sensor development using the tools of nanotechnology)

Researchable Objectives for Quality

- Develop new uniform, statistical sampling methods for use in the field.
- Develop standardized methodologies for uniform quality assessment that can be utilized by industry.
- Explore post-harvest processing and packaging technologies to maintain or enhance quality.
- Utilize breeding selection to maximize desirable quality parameters.
- Optimize management practices to enhance desirable quality parameters.

Researchable Objectives for Health

- Identify key components in grapes/grape products that promote health.
- Perform comparative studies utilizing grapes/grape products
- Promotion of health through consumption of grapes/grape products and prevention of disease.

Researchable Objectives for Health

- Healthy Aging & Inhibition of oxidation and inflammation by grapes/grape products.
- Example conditions to be addressed:
- Cardiovascular
- Obesity (including metabolic syndrome)
- Cancer
- Diabetes
- Dementia

Researchable Objectives for Health

- Bioavailability studies of components in grapes/grape products
- Maintaining and enhancing nutritional quality through processing and packaging.
- Develop new food products from grapes that promote health.